occupied by *Lemmus insularis* Nillson (= *Microtus agrestis* L.), described in the Œfversigt K. Vetensk, Akad. Förhandlingar, Stockholm, I., 33–35, 1844. I therefore propose the name *nesophilus* in place of *insularis* for the Great Gull Island *Microtus*.

VERNON BAILEY.

CHANGE OF NAME FOR SCIURUS ALBIPES QUERCINUS NELSON.

THE name *Sciurus quercinus* which I used for a Mexican squirrel recently described as *S. albipes quercinus* (Proc. Biol. Soc. Wash., June 3, 1898, XII., pp. 150–151), proves to be preoccupied by Erxleben (Syst. Reg. Anim. 1777, p. 432). I therefore propose for the Mexican subspecies the name *hernandezi*.

E. W. NELSON.

NOVEMBER 19, 1898.

PROFESSOR JAMES INGRAHAM PECK.

BY the death of James Ingraham Peck, Williams College loses an able and beloved professor; the Marine Biological Laboratory, an executive officer of rare ability; American Biology, an investigator of keen perception; and a host of young biological workers, a willing helper and an inspiring friend.

Dr. Peck was born at Seneca Castle, Oneida county, New York, August 10, 1863, and entered Williams College from Canandaigua Academy when twenty years of age. After the completion of his college course he remained for one year as a graduate student, and took a second year of graduate work at Johns Hopkins University. In 1892 he was appointed assistant in biology at Williams College, and in 1894 he was promoted to the position of assistant professor, which office he held until the time of his death, November 4, 1898. He leaves a wife, a woman universally beloved, and a little boy.

Although Dr. Peck was a thorough teacher and a man of unusual popularity both with students and officers, it was not through his academic work at Williamstown, but rather through his scientific and executive work at Woods Holl, that he was best known.

In 1888 Dr. Peck prepared one of the first serious contributions to the study of Variation that had been made since the time of Darwin. The summer of 1889 he spent at Woods Holl, where he worked upon the habits of the young of certain food fishes. In 1890 he published his Cymbuliopsis paper. In 1892 he was again a member of the scientific staff of the Fish Commission Laboratory, where he worked upon the Pteropods and Heteropods collected by the Albatross. The summer of 1893 was spent in preparing his paper on the 'Food of the Menhaden,' and in 1894 he continued his plankton studies and prepared a paper on the 'Sources of Marine Food.' In 1895 he was placed in charge of the Laboratory of the Fish Commission, and in 1896 he accepted the position of Assistant Director of the Marine Biological Laboratory.

For the three years that Dr. Peck was in charge of the general affairs of the Marine Biological Laboratory he worked with untiring energy, and inspired all who visited the Laboratory with a spirit of devotion to science and of loyalty to the institution. During the past summer he worked with unabated energy, denied himself the many opportunities for rest and recuperation that his students and friends besought him to take, and returned to Williamstown entirely unfitted to withstand the strain of severe illness. He literally sacrificed himself for science.

H. C. BUMPUS.

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NOTES ON INORGANIC CHEMISTRY.

THE leading article in the last number of the *Chemical News*, is a long criticism of the recent, supposed discovery of a new gas,

etherion, by Charles F. Brush, from the pen of the editor, Sir William Crookes. From his long continued familiarity with work at low pressures, especially in connection with work on radiant energy, and on the so-called meta-elements, it is hardly an exaggeration to say that there is no more competent critic of Brush's work than Professor Crookes. He has repeated some of Brush's experiments and is inclined to attribute the peculiar phenomena obtained to the presence of a trace of aqueous vapor. This seems the more probable, in view of the fact that Brush found that the etherion seemed to be absorbed by phosphorus pentoxid and by soda-lime. Having only seen the abstract of Professor Brush's paper, Professor Crookes does not assume to speak authoritatively in the matter, but only of the probabilities. In their modest, unassuming tone, the papers of both these distinguished scientists might well serve as models.

In an article on the reactions of acetylene in the *Zeitschrift für anorganische Chemie*, Hugo Erdmann and Paul Köthner call attention to the possibility of utilizing acetylene for the production of aldehyde. The thought of the commercial synthetic production of similar substances is not new. Several years ago Krüger and Pückert proposed the manufacture of alcohol by precipitating acetylene with corrosive sublimate, treatment with hydrochloric acid and reduction of the aldehyde formed; indeed, nearly half a century ago the manufacture of 'mineral spirits' was exploited. Apparently these processes would all be too expensive for the production of alcohol, while the continuous process of Erdmann and Köthner might be a commercial possibility for making the more valuable aldehyde. This process consists in leading acetylene through a boiling mixture of 44% sulfuric acid in the presence of mercuric oxid. The aldehyde distills off and the unused acetylene is recovered. The presence of phosphoric acid seems to give a purer product. In a quantitative experiment from 125 grams calcium carbid of 95%, there were obtained 80 cc. of 5% aldehyde. It is not at all improbable that the cheap production of acetylene from calcium carbid may render possible, in the near future, many syntheses of organic products on a commercial scale.

The verification of inorganic data of past years has received a valuable contribution from A. Ladenburg, in the *Berichte*, in the redetermination of the density of ozone. Soret's classic researches of thirty years ago on ozone were with a mixture containing only 5 per cent. ozone and hence not beyond criticism. In Ladenburg's method an 8 to 9 per cent. mixture of ozone and oxygen was directly obtained by usual methods and this mixture condensed to a liquid by means of liquid air. On boiling the mixture much of the oxygen could be driven off, and by repeating the process several times a liquid mixture was obtained containing 86 per cent. ozone. For determination of density Bunsen's 'Ausströmungszeit' method was used. The density found for pure ozone relative to that of oxygen was 1.456, which is very close to the theoretical value 1.5, and the generally received composition of ozone, O_3, is confirmed. In this investigation it was incidentally found that liquid ozone is very dark blue and in layers two or three centimeters thick completely opaque; that it is almost insoluble in water, but 0.00002 part by weight and 0.01 part by volume being dissolved in one of water. In determining the boiling point a mixture of ozone and oxygen boiled at −186° until apparently only ozone was left. The thermometer then rose to −125° when the liquid ozone appeared to begin boiling. At this moment a very violent explosion occurred, the whole apparatus being shattered. It would appear from this that the boiling

point of ozone cannot be below —125°. According to Troost it is —119°, while earlier, Olszewsky had placed it at —106°.

J. L. H.

CURRENT NOTES ON METEOROLOGY.

AUGUST HOT WAVE IN CALIFORNIA.

THE August number of the California Section of the Climate and Crop Service contains an account of the hot wave of that month, by George H. Wilson. This hot wave lasted one week, and was the most severe on record, throughout the Sacramento and portions of the San Joaquin Valleys. Maxima up to 120° were noted, and the temperatures were about 20° above the normal in the great valleys on August 11th. In the Sacramento Valley it is stated that birds flew into the houses, seeking shelter from the withering heat, and in a few cases they are reported to have fallen dead from the trees. During the hot wave there was a marked absence of northerly winds in the interior valleys, and as the ground was very dry, owing to a drought, the surface was effectively heated.

MONTHLY WEATHER REVIEW.

THE August number of the *Monthly Weather Review* is one of unusual interest. Among the papers it contains are the following: 'The Effect of Approaching Storms upon Song Birds,' by C. E. Linney; 'Progress in the Exploration of the Air with Kites at the Blue Hill Observatory,' by A. Lawrence Rotch; 'Destruction by Lightning in New York State during the month of August, 1898,' by R. G. Allen; 'The Measurement of the Wind,' 'Sensible Temperatures or the Curve of Comfort,' and 'Waterspouts on the Lakes,' by Professor Cleveland Abbe.

NOTES.

THE Southern Pacific Railroad Company has recently supplied ordinary meteorological instruments to 181 of its stations between Ashland, Ore.; Ogden, Utah, and El Paso, Texas. The state of the weather, direction of wind, temperature and rainfall are included in the daily record, and at nine important points pressure readings are made. Daily telegraphic reports are forwarded from each point to San Francisco. Weekly crop reports are also sent from 52 important producing centers. The Company forwards over its own wires, without charge to the government, warnings of frosts and hot northers. The meteorological observations thus collected are placed at the disposal of the Weather Bureau.

IN the September number of the *Monthly Review* of the Iowa Weather and Crop Service it it noted that of 266 head of live stock killed in Iowa by lightning during the past summer 118 were found in close contact with wire fences.

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BOTANICAL NOTES.

SOME MORE ATROCIOUS BOTANY.

IT is quite bad enough that we have text-books on elementary botany that are so full of error that teachers have to be warned not to use them, but now we find a new source of confusion and erroneous infection in an unexpected quarter. Our attention has just been called to a recent book, 'Applied Physiology,' by Dr. Overton, published by the American Book Company, in which the author manages to bring in more than the usual number of misrepresentations and misleading statements regarding plants, commonly found in such books. The following examples will give an idea of the botanical pabulum which the Doctor supplies to his pupils:

"The greater part of all young plants is starch" (p. 26). "Each grain [of starch] is made up of layers of pure starch separated by an exceedingly thin layer of a substance like cotton, called cellulose" (p. 26). "As